## **CLAIMS**

Thioxylose compounds, characterized in that they are selected from: 1. a) the compounds of the formula

5

10

15

20

30

I

in which:

- the pentapyranosyl group is a 5-thio-β-D-xylopyranosyl group or a 5-thioβ-L-xylopyranosyl group,

- R is a hydrogen atom, a C2-C6 acyl group, an acetyl group substituted by a nitrogen heterocycle, or a group -COOR',

- R<sub>1</sub> and R<sub>2</sub> independently of one another are each a hydrogen atom, a halogen atom, a cyano, nitro or trifluoromethyl group, a C<sub>1</sub>-C<sub>4</sub> alkyl group optionally substituted by an aromatic ring, a group -COOR', a group -CH2-NR'R", a C1-C4 alkoxy group, a group -NH-CO-R' or a group -NH-SO2-R', and

- R' and R" independently are each a C1-C4 alkyl group; and

b) their addition salts, oxides or quaternary ammonium salts.

Compound according to claim 1, characterized in that the pentapyranosyl 2. group is a 5-thio- $\beta$ -D-xylopyranosyl group or a 5-thio- $\beta$ -L-xylopyranosyl group,

R is a hydrogen atom, a C2-C6 acyl group or a group -COOR',

R' is a C1-C3 alkyl group, and

R<sub>1</sub> and R<sub>2</sub> independently of one another are each a hydrogen atom, a halogen atom, a cyano, nitro or trifluoromethyl group or a C<sub>1</sub>-C<sub>4</sub> alkyl group optionally substituted by an aromatic ring.

- Compound according to claim 1 or 2, characterized in that the 25 pentapyranosyl group is the 5-thio-β-D-xylopyranosyl group.
  - Compound according to any one of claims 1 to 3, characterized in that the 4. pentapyranosyl group is in the 3-position of the pyridine heterocycle.
  - Compound according to any one of claims 1 to 4, characterized in that R<sub>1</sub> and R2 are a hydrogen atom.
  - Compound according to one of claims 1 to 5, characterized in that R is a hydrogen atom.

- 7. Compound according to one of claims 1 to 5, characterized in that R is a group -COCH<sub>3</sub>, a group -COCH<sub>3</sub> or a group -COCC<sub>2</sub>H<sub>5</sub>.
- 8. Process for the manufacture of a compound according to any one of claims 1 to 7, characterized in that it comprises steps consisting in:
  - a) reacting a pyridinol of the formula

in which:

5

10

15

20

25

- R<sub>1</sub> and R<sub>2</sub> independently of one another are each a hydrogen atom, a halogen atom, a cyano, nitro or trifluoromethyl group, a C<sub>1</sub>-C<sub>4</sub> alkyl group optionally substituted by an aromatic ring, a group -COOR', a group -CH<sub>2</sub>-NR'R", a C<sub>1</sub>-C<sub>4</sub> alkoxy group, a group -NH-CO-R' or a group -NH-SO<sub>2</sub>-R', and

R' and R" independently are each a C<sub>1</sub>-C<sub>4</sub> alkyl group,
 with a 5-thioxylopyranose derivative of the formula

in which Hal is a halogen, preferably bromine, and R is a C<sub>2</sub>-C<sub>6</sub> acyl group, in an aprotic solvent, in the presence of a silver salt or a zinc salt, in an anhydrous medium, at a temperature of between 25 and 80°C, for 1 to 10 hours, to give the compound of formula I or the corresponding N-oxide:

$$R$$
 $Q$ 
 $R$ 
 $Q$ 
 $R$ 
 $Q$ 
 $R$ 
 $Q$ 
 $R$ 
 $R$ 
 $R_1$ 
 $R_2$ 
 $R$ 

in which the pentapyranose group is D- or L-5-thioxylopyranose and R, R<sub>1</sub> and R<sub>2</sub> are as defined in the starting compounds;

b) if necessary, reacting the compound of formula I obtained above with a

solution of ammonia in methanol to give the compound of the formula

$$R_1$$
  $R_2$   $R_2$   $R_2$   $R_3$ 

in which R<sub>1</sub> and R<sub>2</sub> are as defined above; and

- c) if necessary, reacting one of the compounds obtained above, I or Ia, with an acid to give the corresponding addition salt; or
- d) if necessary, reacting one of the compounds obtained above, of formula I or Ia, with an organic halide to give the corresponding ammonium salt.
- 9. Process for the manufacture of a compound according to any one of claims
  1 to 7, characterized in that it comprises steps consisting in:
  - a) reacting the tetra-O-acetyl-5-thioxylopyranose of the formula:

in which Ac is the acetyl group, with a compound of the formula

15

20

25

5

$$\mathsf{HO} \biguplus^{\mathsf{R_1}}_{\mathsf{N}} \mathsf{R_2}$$

in which:

- $-R_1$  and  $R_2$  independently of one another are each a hydrogen atom, a halogen atom, a cyano, nitro or trifluoromethyl group, a  $C_1$ - $C_4$  alkyl group optionally substituted by an aromatic ring, a group -COOR', a group -CH<sub>2</sub>-NR'R", a  $C_1$ - $C_4$  alkoxy group, a group -NH-CO-R' or a group -NH-SO<sub>2</sub>-R', and
- R' and R" independently are each a  $C_1$ - $C_4$  alkyl group, in an aprotic solvent, in the presence of a catalyst of the Lewis acid type, at a temperature of between 20 and 60°C, for 1 to 2 hours, to give the compound of the formula

in which R<sub>1</sub> and R<sub>2</sub> are as defined in the starting compounds;

5

b) if necessary, reacting the compound of formula I obtained above with sodium methylate in methanol to give the compound of the formula

in which R<sub>1</sub> and R<sub>2</sub> are as defined above; and

- c) if necessary, reacting one of the compounds obtained above, I or Ia, with an acid to give the corresponding addition salt.
- 10 10. Compound according to any one of claims 1 to 7 for its use as a drug.
  - 11. Use of a compound according to any one of claims 1 to 7 for the preparation of a drug intended for the prevention or treatment of thromboses, especially venous thromboses.